

**REMARKS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1, 3, 5-6, 8-16 and 18-23 are pending in this application. By this Amendment claims 1, 3, 5, 8, 10-11, 13, 16 and 18 are amended and claims 2, 4, 7 and 17 are cancelled. Claims 20-23 are new. No new matter is added. Claims 1, 13, 20 and 22 are the independent claims.

Applicants note with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the U.S.P.T.O.

Applicants also respectfully note the present action indicates that the drawings have been accepted by the Examiner.

**Claim Amendments**

Claims 1 and 13 are amended to include the subject matter, based upon that originally present in claims 7 and 17. Additional non-narrowing amendments to the claims are made to place the claims in better U.S. form and not for any reason related to patentability.

**Rejections under 35 U.S.C. § 103**

**Claims 1-3, 5-7, 9-17, and 19**

Claims 1-3, 5-7, 9-17, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent Publication No. 2003/0163039 ("Pan") in view of US Patent No. 5,046,003 ("Crawford"). Applicants respectfully traverse this rejection for the reasons detailed below.

Claim 1 is amended to include the subject matter of claim 7 and recites *inter alia*, "determining at least one static object area and at least one at least partially moving object area

with reference to the examination object with the aid of cyclical intrinsic movement, **with the determining performed during the scanning.**”

On Pg. 4, Ln. 4-9 of the Office Action, the Examiner relies on Para. [0022] of Pan to disclose the above highlighted limitation. However, Para. [0022] of Pan is only disclosed to “conduct an imaging scan of the cardiac region 52 at a second table speed, different than the first.” Para. [0022] of Pan does not disclose how the cardiac and non-cardiac regions are determined. As disclosed at Para. [0023] and further shown in Fig. 3 of Pan, a “technician or CT scanner operator...provides input into the computer to define a set or regions to be scanned 102, **such as a cardiac scanning region and adjacent non-cardiac scanning regions** of a patient's thorax.” Therefore, the cardiac and non-cardiac regions in Pan are **predetermined by the user before the scanning**. Therefore, Pan fails to disclose “determining at least one static object area and at least one at least partially moving object...**during** the scanning,” as recited in claim 1.

Moreover, as Pan does not determine the cardiac and non-cardiac regions **during the scan**, Pan fails to disclose changing the feed rate **during the scan** in response to detecting cardiac and non-cardiac regions. That is, Pan fails to disclose using “a relatively **low feed rate upon the determining** of the at least one at least partially moving object area, and using a relatively **higher feed rate upon the determining** of the at least one static object area,” as recited in claim 1.

Claim 1 recites *inter alia*, “determining at least one static object area and at least one at least partially moving object area with reference to the examination object **with the aid of cyclical intrinsic movement.**” On Pg. 2 of the Office Action, the Examiner relies on Para. [0008] of Pan to disclose the above highlighted limitation. While, Para. [0008] of Pan discloses “determining a cardiac scanning region and at least one non-cardiac scanning region,” Para. [0008] of Pan does not disclose how this determination is done. Instead, as noted above, Para.

[0023] of Pan discloses this determination to be done manually by the user. Therefore, even if Pan disclosed determining the regions during scanning (which Applicants do not admit), Pan still fails to disclose determining the regions with reference to the examination object's "cyclical intrinsic movement," as recited in claim 1.

Even assuming *arguendo* that Pan and Crawford are combinable (which Applicants do not admit), Crawford still fails to remedy the deficiencies of Pan with respect to claim 1. For at least the foregoing reasons, claim 1 is patentable over Pan. Amended independent claim 13 is at least somewhat similar to claim 1 and therefore patentable for at least somewhat similar reasons. Dependent claims 3, 5-6, 9-12, 14-16, and 19 are at least patentable by virtue of their dependency on one of independent claims 1 and 13. Claims 2, 7 and 17 are cancelled. Applicants, therefore, respectfully request that the rejection to the above claims under 35 U.S.C. § 103(a) be withdrawn.

#### Claim 4

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pan and Crawford as applied to claim 3 above, and further in view of US Patent No. 6,023,494 ("Senzig"). As claim 4 has been cancelled, Applicants respectfully request that the rejection to the above claim under 35 U.S.C. § 103(a) be withdrawn.

#### Claims 8 and 18

Claims 8 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pan and Crawford as applied to claim 1 above, and further in view of US Patent No. 6,421,552 ("Hsieh"). Applicants respectfully traverse this rejection for the reasons detailed below.

Even assuming *arguendo* that Pan, Crawford, and Hsieh are combinable (which Applicants do not admit), Hsieh still fails to remedy the deficiencies of Pan and Crawford as applied to independent claims 1 and 13 above. Therefore, dependent claims 8 and 18 are at least patentable by virtue of their dependency on one of independent claims 1 and 13. Applicants, therefore, respectfully request that the rejection to the above claims under 35 U.S.C. § 103(a) be withdrawn.

#### **New Claims**

Applicants respectfully submit that new claims 20-23 are patentable for reasons somewhat similar to those discussed above with respect to amended claims 1, 8, 13 and 18, noting that each claim should be interpreted separately, based solely upon its own limitations. Specifically, new independent claim 20 includes the subject matter of original claims 1 and 4 and new independent claim 22 includes the subject matter of original claims 4 and 13. Dependent claims 21 and 23 include the subject of claims 8 and 18. Thus, new claims 20 and 22 are patentable for at least somewhat similar reasons to original claims 1 and 13, respectively. Dependent claims 8 and 18 are at least patentable by virtue of their dependency on one of independent claims 1 and 13.

In addition, Applicants note beforehand that original claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pan and Crawford in view of Senzig. Even assuming *arguendo* that Pan, Crawford, and Senzig are combinable 35 U.S.C. § 103(a) (which Applicants do not admit), Senzig still fails to remedy the deficiencies of Pan and Crawford as applied to claims 1 and 13 above, and therefore also new claims 20 and 22. Specifically, as disclosed at Col. 6, Ln. 40-47, Senzig only teaches using a “scout view” or manual determination to determine a “transition region.” Therefore, **Senzig also fails to disclose determining the**

**regions with reference to the examination object's "cyclical intrinsic movement," as recited in independent claims 20 and 22.**

**CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Donald J. Daley, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

  
Donald J. Daley, Reg. No. 34,313  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

DJD/NKP:aem

N<sup>P</sup>